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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,029	06/24/2004	Luciano Di Maio	22106-00068-US1	5202
30678	7590	10/19/2005	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ LLP SUITE 800 1990 M STREET NW WASHINGTON, DC 20036-3425			PATEL, DHARTI HARIDAS	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/500,029

Applicant(s)

MAIO ET AL.

Examiner

Dharti H. Patel

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/24/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being unpatentable over Wisbey et al., Patent No. 5,612,579. Wisbey teaches an electric power distribution center integrating main power distribution and switching components and individual load distribution and protection components with system monitoring and control components for use on aircraft. With respect to claim 1, the electric power distribution center comprises at least three protection and control devices (see Col. 4, lines 57-58) 36 coupled to a load bus 68, 36 coupled to a load bus 70, and a tie bus contactor 32; a first and a second of said protection and control devices detecting a failure on a feeder bus-bar, and a third of said protection and control devices comprising means for coordinating an electric power distribution center functionality as disclosed in Col. 4, lines 37-59, and Fig. 4.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wisbey et al., Patent No. 5,612,579, in view of Shvach et al., Patent No. 6,005,757. With respect to claim 2, Wisbey et al. teaches an electric power distribution center that comprises at least three protection and control devices, but does not teach that the first and second protection and control devices communicate to the third protection and control device via an optical cable.

Shvach et al. teaches electrical switching devices include circuit switching devices and circuit interrupters such as circuit breakers employing predetermined settings in connection with a trip function or user-interface. Shvach teaches that the use of optical cables is well known in the art for communication between devices as disclosed in Col. 5, lines 13-21.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shvach et al., which teaches an optical cable for communication, into the electric power distribution center taught by Wisbey et al. to increase the speed of communication between the devices.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wisbey et al., Patent No. 5,612,579, in view of Shvach et al., Patent No.

6,005,757 and Hamann et al., Patent No. 5,457,729. With respect to claim 3, Wisbey et al. teaches an electric power distribution center that comprises at least three protection and control devices, but does not disclose that an additional digital communication channel is used for a service communication among the three protection and control devices.

Hamann et al. teaches a communication network signaling systems that couples a signal transfer point to a plurality of channel banks through links which include link monitor and test units. Hamann et al. teaches a second channel unit for a service communication in a communication network signaling system as disclosed in Col. 8, lines 45-52.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hamann et al., which teaches an additional digital communication channel, into the electric power distribution center taught by Wisbey et al. because it is well known in the art of network circuit breaker devices to have communication between the devices to configure the overall network in response to fault or power supply conditions occurring on the network with Hamann teaching an effective communication method that provides higher reliability.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisbey et al., Patent No. 5,612,579, in view of Spencer et al., Patent No. 6,212,049. Wisbey et al. does not teach that the electric power distribution center comprises a software architecture having a first software part which is

performed in software cycles, and a second software part which is performed with events. Spencer et al. teaches a load center monitor for electrical power lines. With respect to claim 4, Spencer teaches a software architecture that comprises a first software part which is performed in software cycles as disclosed in Fig. 8, and a second software part which is performed with events as disclosed in Fig. 7B. With respect to claim 5, Spencer teaches that second software part is performed in a asynchronous way with respect to said first software part as disclosed in Fig. 7B.

Both teachings are related by having circuit breakers in a power distribution system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Spencer et al., which teaches a software architecture, into the electric power distribution center taught by Wisbey et al. in order to create a protection and control device that is both fast and efficient.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisbey et al., Patent No. 5,612,579, in view of Schuster et al., Patent no. 6,801,792. With respect to claim 6, Wisbey et al. teaches an electric power distribution center that comprises at least three protection and control devices but does not disclose that each of said first, second and third protection and control device comprises a human machine interface.

Schuster et al. teaches a communication system for centrally controlled transportation system that comprises a human machine interface as disclosed in Col. 4, lines 51-54.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schuster et al., which teaches a protection system having a human machine interface, into the electric power distribution center taught by Wisbey et al. to efficiently be able to view and/or change the electrical parameters of the protection and control devices.

With respect to claim 7, the Wisbey reference shows that the high speed transfer system is provided on a circuit board substrate that would be an electrical distribution switchboard.

6. ***Conclusion***

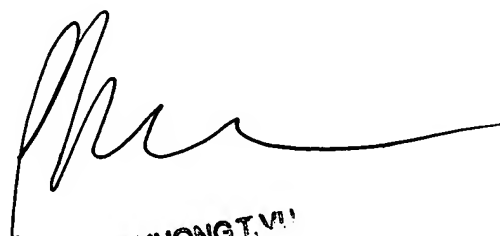
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dharti H. Patel whose telephone number is 571-272-8659. The examiner can normally be reached on 8:30am - 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800, Ext. 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

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PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DHP  
10/06/2005



PHUONG T. VI  
PRIMARY EXAMINER